

**DETAILED ACTION**

***Examiner's Comments***

An amendment, amending claims 1, 3 and 7 and cancelling claim 6, was received and entered on 9/23/11.

***Response to Arguments***

1. Applicant's arguments filed 9/23/11 have been fully considered but they are not persuasive.

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Applicant first argues that Bedetti merely discloses a process for forming granules wherein the fluidification of the bed and solidification step are carried out by the same flow of air and that Bedetti does not teach that the granules are cooled once formed. This is not persuasive. While the examiner agrees that the same flow of air is used for fluidification and cooling, Bedetti also teaches that the formed granules are cooled (see, e.g. p. 7:27-8:2). Furthermore, Bedetti teaches that the finished granules come out on the bottom of the bed (see, e.g., Fig. 5) and that the air is progressively cooler lower in the bed (6:24-33). Thus, it is implicit in the disclosure of Bedetti that the finished granules will be cooled as the descent from the hot upper layer to the cooler lower layer.

Applicant also argues that Joscelyne fails to teach cooling the formed, finished granules because the granules are dehydrated in the cooling bed G. This is not persuasive. Joscelyne teaches that the granules are formed in the first fluid bed E before being introduced into the cooling and dehydrating bed G (2:44-3:17). Thus, Joscelyne teaches that formed solid particles are moved from the first bed into the second bed for cooling at that the cooling bed is separated in order to allow the fluidized bed apparatus to be operated using a single gas stream and that, by doing so, the system can be operated at a lower cost by ensuring maximum heat recovery through the system (2:13-21). While Joscelyne also teaches that the second bed dehydrates the formed granules, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Bedetti teaches that finished granules are cooled and Joscelyne teaches that formed solid particles are advantageously cooled in a second fluidized bed in order to ensure maximum heat recovery throughout the system.

Applicant argues that Mavrovic cannot be compared to the air inlet claimed in claim 3 because the claimed inlet serves to discharge the cooled finished granules. This is not persuasive. The currently presented claim language does not state that the pocket is used to discharge the cooled granules. Furthermore, a recitation with respect to the manner in which an apparatus is intended to be used does not differentiate the claimed apparatus from a prior art apparatus which discloses the claimed structural limitations. In this case, Mavrovic teaches a fluidized bed apparatus where the cooling air is introduced

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through an opening in the wall of the container which is fixed to the base plate which supports the second fluid bed (7, Fig. 1).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedetti (WO 02/074427) in light of Joscelyne (US 2,635,684).

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**Claims 1-2:** Bedetti teaches a method of producing granules comprising the steps of: forming a fluid bed of solid seeds of a predetermined substance by continuously feeding the seeds into the bed (i.e. using a distributor device for solid seeds) (p. 5:6-13) at the same time as a growth liquid is introduced into the fluidized bed (6:3-14) in order to form granules of a desired size (see, e.g., Abst.). Bedetti further teaches that the particles are cooled with a cooling air flow (9:10-14), but fails to disclose that cooling occurs in a separate fluidized bed using the same air flow. Joscelyne teaches a method of operating a fluidized bed wherein granules are first formed and introduced into a first fluidized bed and then subsequently cascaded to be cooled in a separate fluidized bed positioned below the first (claimed "in series") (2:44-3:17; Fig. 1, 'F') (In this configuration, Joscelyne further teaches that the air is blown in through D so that it first flows through the cooling bed and then through the granulation bed, Fig. 1). Joscelyne also explains that such a configuration allows the fluidized bed apparatus to be operated using a single gas stream and that, by doing so, the system can be operated at a lower cost by ensuring maximum heat recovery through the system (2:13-21). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a second cooling fluidized bed in the method of Bedetti in order to have used a single air stream which allows for lower costs of operation by maximizing heat recover in the system.

4. Claims 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Bedetti and Joscelyne in light of Mavrovic (US 3,836,611).

**Claims 3-5:** Joscelyne also teaches an apparatus for performing the method of claim 1 comprising a structure shaped like a container (B) with a granulation space inside of it (Fig. 1), including a shelf supporting a first fluidized bed which is permeable to air flow (E), a base plate below said shelf which supports a second fluidized bed (G), a vertical downcomer with the granulation space (F) and an air blower to distribute air with the space (D) wherein the downcomer comprises a vertical panel spaced away from a wall of the container with an interspace having a horizontal bottom space which allows passage of the particles and which is in communication at the top with the container (Fig. 1, F).

Joscelyne fails to teach that the second fluid bed is in communication with the outside, but does teach that the cooling air is introduced to the bed through an opening which is affixed to the base plate

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(D). Mavrovic teaches a fluidized bed apparatus where the cooling air is introduced through an opening in the wall of the container which is fixed to the base platen which supports the second fluid bed (7, Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used an opening which was in contact with the outside to supply the cooling air in the method of Bedetti/Joscelyne with the predictable expectation of success because both Mavrovic and Joscelyne teach methods of cooling fluidized beds using air and further because the use of ambient air as a cooling medium would have reduced the costs associated with supplying cooling air to the fluidized bed in Joscelyne.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bedetti and Joscelyne and Mavrovic in light of Mason et al. (US 4,338,878).

**Claim 7:** Bedetti, Joscelyne and Mavrovic fail to expressly teach that the opening is able to slide vertically. However, Mason teaches a fluidized bed with an input/output opening (22, Fig. 1) wherein the opening can be a sliding opening (4:31-53). The selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a sliding opening as taught by Mason in the combined method of Bedetti, Joscelyne and Mavrovic with the predictable expectation of success.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT VETERE whose telephone number is (571)270-1864. The examiner can normally be reached on Mon-Fri 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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